

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1-2. (Cancelled)

3. (Currently Amended) ~~The self-piercing rivet in Claim 2,~~ A self-piercing rivet for coupling a plurality of workpieces comprising:

a flange with a first diameter and a shank with a hollow cavity extending from the flange, wherein the shank is a straight cylinder with outer diameter smaller than the first diameter, the shank defining a hollow cavity, and a conical section tapered from a shank end and converging towards the flange at angle α and a straight cylinder section with an inner diameter extending from the conical section, wherein the shank has an outer diameter and a substantially flat ring-shaped end surface with a radial length substantially perpendicular to the shank outer diameter, and wherein the angle α of the conical section ranges between about 70° and about 110°,

wherein the thickness of the shank at the straight cylinder section of the hollow cavity is 25 to 45% of the outer diameter of the shank, and wherein the flange defines a cylindrical outer wall having an axial length 15 to 20% of the outer diameter of the shank.

4-5. (Cancelled)

6. (Currently Amended) ~~The self-piercing rivet in accordance with Claim 1, A self-piercing rivet for coupling a plurality of workpieces comprising:~~

a flange with a first diameter and a shank with a hollow cavity extending from the flange, wherein the shank is a straight cylinder with outer diameter smaller than the first diameter, the shank defining a hollow cavity, and a conical section tapered from a shank end and converging towards the flange at angle α and a straight cylinder section with an inner diameter extending from the conical section, wherein the shank has an outer diameter and a substantially flat ring-shaped end surface with a radial length substantially perpendicular to the shank outer diameter, and wherein the angle α of the conical section ranges between about 70° and about 110°, and

wherein the radial length of the substantially flat ring-shaped end surface of the shank is between 3 and 10% of the outer diameter of the shank.

7-13. (Cancelled)

14. (Previously Presented) A self-piercing rivet for coupling a plurality of workpieces comprising:

a flange defining an outer cylindrical wall having an axial length; and

a shank having a body with an outer radius smaller than a radius of the flange, the shank defining a hollow cavity, the shank having a conical tapered section having an angle between 70° and 110° and wherein the axial length of the flange is about 30 – 40% of the outer radius of the shank.

15. (Original) The self-piercing rivet according to Claim 14, wherein the hollow cavity has a diameter of 25 to 45% of the outer radius.

16. (Cancelled)

17. (Original) The self-piercing rivet according to Claim 14, defining a flat end surface adjacent the conical tapered section, wherein the radial length of the end surface of the shank is between about 0.2 and 0.6 mm.

18. (Previously Presented) The self-piercing rivet according to Claim 14 wherein the plurality of workpieces have a first thickness and wherein the cavity has a length of 70% of the first thickness.

19-23. (Cancelled)